

High Gain Planar Compact Loop Antennas With High Radiation Resistance

ABSTRACT

1 An antenna comprises a first electrically conductive
2 loop; a feed point for feeding radio frequency energy
3 into the first conductive loop; and a second electrically
4 conductive loop, the first electrically conductive loop
5 and the second electrically conductive loop each having a
6 common conductive portion. A tuning capacitor is disposed
7 along the second conductive loop. The second conductive
8 loop is disposed within the first conductive loop. The
9 first conductive loop may be polygonal or circular. The
10 first and second conductive loops may be rectangular. The
11 second conductive loop may be a conductor connected
12 between a first point on the first conductive loop and a
13 second point on the first conductive loop. A method for
14 configuring this class of antennas includes the step of
15 placing a capacitor in the second conductive loop.